

CATALOGUE OF THE NAMES PUBLISHED BY HECTOR LÉVEILLÉ: XVII

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ABSTRACT. The species described by Lévillé belonging to the families Betulaceae, Fagaceae and Salicaceae are evaluated. Other species described in, but not belonging to, these families are also included. There are no new taxa or combinations.

INTRODUCTION

This is the final paper in this series and follows the same basic format as those previously published and listed below.*

My colleague, Mr D. McKean, collaborated with me on the Salicaceae.

The three families in this part contain some difficult genera with which it would take considerable time to become familiar. Therefore, unless there seemed to be good reason for departing from it, the taxonomy already established has been followed.

I am very grateful to Professor C. C. Huang of Guangzhou (Canton) for examining material of *Quercus mairei* Lévl. and *Myrica cavaleriei* Lévl. for me, and providing the correct names for these two species.

BETULACEAE

1977. *Alnus fauriei* Lévl. & Van. in Bull. Soc. Bot. Fr. 51: 423 (1904); Rehder in Journ. Arn. Arb. 10: 118 (1929) & 17: 66 (1936); Ohwi, Fl. Jap. (Engl. ed.) 375 (1965).

JAPAN. (Hondo), in monte Guwassan, 28 ix 1897, *Faurie* 783 (holo. E).

Rehder refers to an identification label by Koidzumi with the type specimen. The holotype in E consists only of a scrap of fruiting material so it seems that part of the whole specimen is missing.

1978. *Alnus nepalensis* D. Don, Prodr. Fl. Nep. 58 (1825); Lévl., Fl. Kouy-Tchéou 124 (1914) & Cat. Pl. Yunnan 66 (1916); Rehder in Journ. Arn. Arb. 17: 67 (1936).

A. mairei Lévl. in Bull. Acad. Géog. Bot. 24: 283 (1914).

CHINA. Yunnan, vallées et mont. à Tong-tchouan, 2500-2700m, grand arbre, feuil. caduques, chatons jaunes, xi 1913, *E. E. Maire* s.n. (holo. *A. mairei*, E).

* Part I, *Notes RBG Edinb.* 23: 573-596 (1961); II, 24: 73-78 (1962); III, 26: 333-346 (1966); IV, 27: 1-10 (1966); V, 27: 265-292 (1967); VI, 30: 239-294 (1970); VII, 31: 397-435 (1972); VIII, 32: 93-116 (1972); IX, 34: 327-402 (1976); X, 35: 247-264 (1977); XI, 35: 265-279 (1977); XII, 37: 125-151 (1978); XIII, 38: 453-485 (1980); XIV, 40: 157-203 (1982); XV, 40: 345-358 (1982); XVI, 40: 475-505 (1983).

1979. *Betula chinensis* Maxim. in Bull. Soc. Nat. Mosc. 54(1): 47 (1879); Nakai in Bot. Mag. Tokyo 29: 44 (May 1915) & Fl. Sylv. Kor. 2: 35 (1915); Sargent, Pl. Wils. 2: 479 (1916).

B. fauriei [Lévl. in litt. ex] Nakai, nom. nud. pro syn. praec.
KOREA. (Kangwon), in monte des diamants, 24 vi 1906, *Faurie* 204 (E).

1980. *Betula ermanii* Cham. var. *subcordata* Koidz. in Bot. Mag. Tokyo 27: 148 (1913); Sarg., Pl. Wils. 2: 471 (1916); Rehder in Journ. Arn. Arb. 10: 118 (1929).

B. vulcani Lévl. in Bull. Soc. Bot. Fr. 51: 423 (1904).
JAPAN. Hondo, presqu'île des Volcans (Yezo), 28 ix 1886, *Faurie* 1438 (holo. *B. vulcani*, E).

1981. *Betula schmidtii* Regel in Bull. Soc. Nat. Mosc. 38(2): 412 (1865); Nakai in Bot. Mag. Tokyo 29: 44 (May 1915) & Fl. Sylv. Kor. 2: 34 (1915); Sarg., Pl. Wils. 2: 475 (1916).

B. punctata [Lévl. in litt. ex] Nakai, nom. nud. pro syn. praec.
KOREA. (Kangwon), in monte des diamants, 23 vi 1906, *Faurie* 209 (E).

Carpinus esquirolii Lévl. = *Engelhardia spicata* [Lesch. ex] Bl. var. *integra* (Kurz) Manning ex van Steenis (Juglandaceae).

1982. *Carpinus laxiflora* Bl. in Mus. Bot. Lugd.-Bat. 1: 309 (1851); Rehder in Journ. Arn. Arb. 17: 67 (1936).

?*C. laxiflora* Bl. var. *chartacea* Lévl. in Bull. Soc. Bot. Fr. 51: 424 (1904).

No specimen was cited or found.

1983. *Carpinus seemeniana* Diels in Bot. Jahrb. 29: 279 (1900); Sarg., Pl. Wils. 2: 430 (1916); Rehder in Journ. Arn. Arb. 17: 67 (1936).

C. pinfaensis Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 142 (1905); Lévl., Fl. Kouy-Tchéou 125 (1914), pro syn. sub *C. pubescens* Burkill; Hu in Sunyatsenia 1: 119 (1933), pro syn. sub *C. pubescens*.
CHINA. Kweichow, Pin-fa, arbre, 25 v 1903, *Cavalerie* 1011 (holo. *C. pinfaensis*, E).

FAGACEAE

1984. *Castanea mollissima* Bl. in Mus. Bot. Lugd.-Bat. 1: 286 (1851); A. Camus, Les Châtaigniers, Atlas t. 13, 14, 73 f. 5-9, texte 201 (1929); Rehder in Journ. Arn. Arb. 17: 68 (1936).

Castanopsis yunnanensis (Franch.) Lévl., Cat. Pl. Yunnan 66 (1916).

Castanea vulgaris Lam. var. *yunnanensis* Franch. in Journ. de Bot. 13: 196 (1899).

No Lévillé type is involved.

Castanopsis cameliifolia Lévl. = *Gordonia axillaris* (Ker) Szyszyl (Theaceae).

Castanopsis cavaleriei Lévl. = *Sloanea hemsleyana* (Ito) Rehder & Wilson (Tiliaceae). (Det. M. J. E. Coode, 1981).

1985. *Castanopsis chinensis* Hance in Journ. Linn. Soc. (Bot.) 10: 201 (1868); A. Camus, Les Châtaigniers, Atlas t. 56, f. 6–11, texte 398 (1929).

Quercus argyi Lévl. in Mem. Real Acad. Ci. Artes Barcelona, ser. 3, 12: 548 (1916), nom. nud.

Castanopsis sp.; Rehder in Journ. Arn. Arb. 10: 120 (1929) & 17: 71 (1936).

CHINA. Kiangsu, Suo-se, d'Argy s.n. (*Q. argyi*, E).

There were several pistillate and staminate specimens within the cover of *Q. argyi*. Rehder (l.c. 17: 71, 1936) related the specimens to *C. fargesii* Franch. but they seem to me to be the same as *C. chinensis*.

Rehder cited d'Argy nos. 842 & 856 but these were numbered slips inserted after collection and are unrelated to a d'Argy collecting number.

1986. *Castanopsis cryptoneuron* (Lévl.) A. Camus ex Rehder in Journ. Arn. Arb. 10: 119 (April 1929) & 17: 71 (1936); A. Camus, Les Châtaigniers, Atlas, t. 54, f. 1–4, comb. inval., texte 418 (Nov.–Dec. 1929), & Les Chênes texte 3: 474 (1952).

Quercus cryptoneuron Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Cat. Pl. Yunnan 67 (1916).

CHINA. Yunnan, forêts de Long-Ky, 700m, chêne vert, feuilles velues et rousses endessous, ix, E. E. Maire s.n. (holo. *Q. cryptoneuron*, E).

It is clear that Rehder validated the combination *Castanopsis cryptoneuron* a few months before Camus.

1987. *Castanopsis cuspidata* (Thunb.) Schottky in Bot. Jahrb. 47: 625 (1912); Sarg., Pl. Wils. 3: 204 (1916); A. Camus, Les Châtaigniers, Atlas, t. 60, f. 1–6, texte 429 (1929); Rehder in Journ. Arn. Arb. 17: 68 (1936).

Castanea fauriei Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 142 (1905); A. Camus, Les Châtaigniers, texte 241 (1929).

JAPAN. Kyushu, circa Nagasaki, 5 vi 1899, *Faurie* 3681 (type—*C. fauriei*, E).

1988. *Castanopsis eyrei* (Champ.) Tutcher in Journ. Linn. Soc. (Bot.) 37: 68 (1905); Rehder in Journ. Arn. Arb. 17: 69 (1936), excl. syn. *C. neo-cavaleriei* Camus; Chun in Sunyatsenia 1: 217 (1934), p.p. excl. syn. *Q. castanopsis* Lévl.

Quercus eyrei Champ. apud Benth. in Hook., Journ. Bot. & Kew Misc. 6: 114 (1854).

Castanopsis caudata Franch. in Nouv. Arch. Mus. Paris sér. 2, 7: 87 (1884); Rehder in Journ. Arn. Arb. 10: 119 (1929), p.p. excl. syn. *Q. castanopsis*; Hand.-Mazz., Symb. Sin. 7: 28 (1929).

Quercus cepifera Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl. Kouy-Tchéou 127 (1914), p.p. quoad sp. fol. et fl., excl. sp. fruct.; Camus, Les Chênes 3(2): 1154 (1952–54).

Q. trinervis Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl. Kouy-Tchéou 128 (1914).

Castanopsis asymetrica Lévl., Fl. Kouy-Tchéou 125 (1914); Camus, Les Châtaigniers 472 (1929), Atlas, t. 72, f. 15 (1929).

C. trinervis (Lévl.) Camus in Bull. bimens. Soc. Linn. Lyon 8: 87 (1929) & Les Châtaigniers, texte 400 (1929).

CHINA. Kweichow, sud de Pin-fa, rare, grand arbre, 8 vi 1905, *Cavalerie* 2341 p.p. (holo. *Q. cepifera*, E); Pin-fa, montagnes, 20 viii 1908, *Cavalerie* 3275 (holo. *Q. trinervis*, E); Kouy-yang, mont. du Collège, arbre, fleurs blanches, 15 iv 1898; *Chaffanjon in herb. Bodinier* 2235 (syntype *C. asymetrica*, E); Kouy-yang, bois d'une pagode, arbre, 3 v 1904, *Cavalerie* 2078 (syntype *C. asymetrica*, E); Kien lin chan, fleurs blanches en chaton odorantes, feuilles de camélia, 2 v 1904, *Esquirol* 17 (syntype *C. asymetrica*, E).

The fruiting part of *Q. cepifera* belongs to *Lithocarpus spicatus* (q.v.).

1989. *Castanopsis fargesii* Franch. in Journ. de Bot. 13: 195 (1899); Rehder in Journ. Arn. Arb. 10: 119 (1929); A. Camus, Les Châtaigniers, Atlas, t. 47, f. 7-9, texte 373 (1929).

Quercus pinfaensis Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl. Kouy-Tchéou 128 (1914).

CHINA. Kweichow, Pin-fa, bois, gr. arbre, 11 vi 1903, *Cavalerie* 1065 (holo. *Q. pinfaensis*, E).

1990. *Castanopsis hystrix* (Hook. f. & Thoms.) A.DC.; Rehder in Journ. Arn. Arb. 10: 118 (1929) & 17: 68 (1936); A. Camus, Les Chênes, texte 3: 474 (1952).

Castanea bodinieri Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 142 (1905); Lévl., Cat. Pl. Yunnan 66 (1916).

Quercus brunnea Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl. Kouy-Tchéou 127 (1914); A. Camus, Les Châtaigniers, Atlas, t. 28, f. 9-11, texte 482 (1929).

Castanopsis bodinieri (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 30: 100 (1916).

Castanopsis sp.; Rehder in Journ. Arn. Arb. 17: 71 (1936).

CHINA. Yunnan, environs de Yunnan-sen, bois de la pagode de Kiang tchou se, grande arbuste ou petit arbre, fruits en long épi à glandes sessiles, serrés, 2 ii 1897, *Bodinier* s.n. (holo. *Castanea bodinieri*, E). Kweichow, Pin-fa, bois, 13 iv 1905, *Cavalerie* 2299 (holo. *Q. brunnea*, E).

1991. *Castanopsis neo-cavaleriei* A. Camus in Bull. bimens. Soc. Linn. Lyon 8: 87 (1929), Les Châtaigniers, Atlas, t. 72, f. 1-12, texte 375 (1929)—non *Castanopsis cavaleriei* Lévl. (1913); Rehder in Journ. Arn. Arb. 17: 70 (1936).

Quercus cavaleriei Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 142 (1905); Lévl., Fl. Kouy-Tchéou 127 (1914); Rehder in Journ. Arn. Arb. 10: 119 (1929), pro syn. sub *C. tribuloides* Wall. var. *echidnocarpa* King.

Q. castanopsis Lévl. in Fedde, Rep. Sp. Nov. 12: 363 (1913) & Fl. Kouy-Tchéou 127 (1914).

Synaedrys cavaleriei ('cavalesii') (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 30: 194 (1916).

CHINA. Kweichow, Pin-fa, haut mont., petit arbre, 15 vii 1902, *Cavalerie* 57 (holo. *Q. cavaleriei*, E); Pin-fa, Ma-jo, montagnes, v. 1902, *Cavalerie* 57 (syntype *Q. castanopsis*, E), viii 1908, *Cavalerie* 57 (syntype *Q. castanopsis*, E); Pin-fa, haut. mont., petit arbr., 3 vi 1902, *Cavalerie* 1268 (syntype *Q. castanopsis*, E).

1992. *Castanopsis tibetana* Hance; Rehder in Journ. Arn. Arb. 10: 119 (1929) & 17: 70 (1936); A. Camus, Les Châtaigniers, Atlas, t. 26, texte 288 (1929).

Quercus franchetiana Lévl., Fl. Kouy-Tchéou 126 in clavi, 128 (1914);

A. Camus, Les Châtaigniers, texte 485 (1929).

CHINA. Kweichow, sud de Pin-fa, bord rivièrè, grand arbre, 5 vii 1905, *Cavalerie* 2407 (holo. *Q. franchetiana*, E).

1993. *Lithocarpus megalophyllus* Rehder & Wils. in Sarg., Pl. Wils. 3: 208 (1916).

Quercus mairei Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Cat. Pl.

Yunnan 67 (1916); A. Camus, Les Chênes 3: 1162 (1953)—non *Pasania mairei* Schott (1912) = *Lithocarpus mairei* (Schott) Rehder (1919).

Lithocarpus sp.; Rehder in Journ. Arn. Arb. 10: 120 (1929).

CHINA. Yunnan, forêts de Long-Ky, 700 m, arbre moyen, feuilles persistantes, fl. blanches, vi 1912, *E. E. Maire* s.n. (holo. *Q. mairei*, E).

1994. *Lithocarpus spicatus* Rehder & Wils.; Rehder in Journ. Arn. Arb. 10: 120 (1929).

Quercus cepifera Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl.

Kouy-Tchéou 127 (1914) quoad sp. fruct. excl. spec. fol. et fl.

CHINA. Kweichow, sud de Pin-fa, rare, grande arbre, 8 vi 1905, *Cavalerie* 2341 p.p. (holo. *Q. cepifera*, E).

The flowering and leafy part of *Q. cepifera* belongs to *Castanopsis eyrei* (q.v.).

1995. *Quercus acuta* Thunb., Fl. Jap. 175 (1784); Nakai, Fl. Sylv. Kor. 3: 33, t. 22 (1917); Rehder in Journ. Arn. Arb. 10: 122 (1929); A. Camus, Les Chênes, Atlas 1: 20, t. 22, f. 1-8 (1934), texte 1: 305 (1938); Menits. in Nov. Syst. Pl. Vasc. 14: 58 (1977).

Q. carpostachys Lévl. in Bull. Soc. Bot. Fr. 52: 142 (1905).

Q. kasaimok, *Q. pseudoglauca* & *Q. quelpaertensis* [Lévl. in litt. ex] Nakai in Bot. Mag. Tokyo 29: 61 (1915) & Fl. Sylv. Kor. 3: 33 (1917), nom nud. pro syn. sub *Q. acuta*.

Q. kasaiensis Lévl. in herb. nom. nud.

JAPAN. Matsushima, 30 vii 1898, *Faurie* 792 (typus *Q. carpostachys*, E).

KOREA. Quelpaert in sylvis, v 1911, *Taquet* 5992 (*Q. kasaimok*, *Q. kasaiensis*, E), v 1911, *Taquet* 5994 (*Q. pseudoglauca*, E); v 1911, *Taquet* 5996, 5998 (*Q. quelpaertensis*, E).

Faurie 792 was not annotated by Léveillé and may not be the holotype. The Korean collections cited above are not type specimens as the species were not described.

Quercus dunniana Lévl. = *Sageretia rugosa* Hance (Rhamnaceae)

1996. *Quercus engleriana* Seemen in Engl., Bot. Jahrb. 23 (Beibl. 57): 47 (1897); A. Camus, Les Chênes, Atlas 2: 11, t. 88 f. 13-22, t. 89, f. 1-9 (1935-36), texte 2: 33 (1939).

Myrica cavaleriei Lévl. in Fedde, Rep. Sp. Nov. 12: 537 (1913).

Quercus sp.; Rehder in Journ. Arn. Arb. 10: 122 (1929) & 17: 72 (1936). CHINA. Kweichow, route Pin-fa-Kouy-yang, ht. plateau, iv-vi 1908, *Cavalerie* 3184 (holo. *M. cavaleriei*, E).

1997. *Quercus glauca* Thunb., Fl. Jap. 175 (1784); Rehder in Journ. Arn. Arb. 10: 121 (1929) & 17: 72 (1936); A. Camus, Les Chênes, Atlas 1: 18, t. 19 (1934), texte 1: 282 (1938); Fang, Ic. Pl. Omeiens. 2: t. 126 (1945); Menits. in Nov. Syst. Pl. Vasc. 13: 66 (1976).

Q. vaniotii Lévl. in Fedde, Rep. Sp. Nov. 12: 364 (1913) & Fl. Kouy-Tchéou 128 (1914).

Q. taquetii [Lévl. ex] Nakai in Bot. Mag. Tokyo 29: 62 (1915) & Fl. Sylv. Kor. 3: 36 (1917), nom. nud. pro syn. sub *Q. myrsinaefolia* Bl.; Sarg., Pl. Wils. 3: 236 (1916), Fang, Ic. Pl. Omeiens. 2: t. 126 (1945), pro syn. sub *Q. myrsinaefolia*.

Q. blakei Skan var. *vaniotii* (Lévl.) Chun in Journ. Arn. Arb. 9: 153 (1928).

CHINA. Kweichow, Pin-fa, bois, 20 iv 1908, *Cavalerie* 3274 (holo. *Q. vaniotii*, E).

KOREA. Quelpaert in sylvis, v 1911, *Taquet* 6000, 6001, 6002 (*Q. taquetii*, E).

1998. *Quercus helferiana* DC., Prodr. 16(2): 101 (1864); A. Camus, Les Chênes, Atlas 1: 25, t. 29 (1934), texte 1: 336 (1938); Menits. in Nov. Syst. Pl. Vasc. 14: 53 (1977).

Q. prainiana Lévl. in Fedde, Rep. Sp. Nov. 12: 363 (1913), Fl. Kouy-Tchéou 128 (1914) & Cat. Ill. Pl. Seu-Tchouen 23 (1918).

'*Q. praini*'; Rehder in Journ. Arn. Arb. 10: 121 (1929) & 17: 72 (1936).

CHINA. Kweichow, Ou-kouen à Li-le, ouest de Lo-fou, sommet de montagne, rare, xi 1905, *Cavalerie* 2641 (holo. *Q. prainiana*, E).

1999. *Quercus mongolica* [Fisch. ex] Ledeb., Fl. Ross. 3: 589 (1850); Rehder in Journ. Arn. Arb. 10: 120 (1929).

Q. mongolica [Fisch. ex] Ledeb. var. *liaotungensis* (Koidz.) Nakai f. *glabra* (Lévl. ex Nakai) in Bot. Mag. Tokyo 29: 58 (1915) & Fl. Sylv. Kor. 3: 24 (1917), based on *Q. funebris* var. *glabra* Lévl. in litt., nom. nud.

Q. mongolica [Fisch. ex] Ledeb. var. *liaotungensis* (Koidz.) Nakai f. *funebris* (Lévl. ex Nakai) in Bot. Mag. Tokyo 29: 58 (1915) & Fl. Sylv. Kor. 3: 24 (1917), based on *Q. funebris* Lévl. in litt., nom. nud.

Q. mongolica [Fisch. ex] Ledeb. var. *liaotungensis* (Koidz.) Nakai f. *undulatifolia* (Lévl. ex Nakai) in Bot. Mag. Tokyo 29: 58 (1915) & Fl. Sylv. Kor. 3: 24 (1917), based on *Q. undulatifolia* Lévl. in litt., nom. nud.

KOREA. Quelpaert in sylvis, v 1911, *Taquet* 5984 (typus f. *funebris*, E); *Taquet* 5983 (typus f. *undulatifolia*, E).

Q. funebris and *Q. undulatifolia* were never described by Léveillé but were validated as forms by Nakai.

Rehder (Journ. Arn. Arb. 10: 120, 1929) related these two taxa to *Q. mongolica* but he and Wilson (Sarg., Pl. Wils. 3: 233, 1916) had earlier

related them to *Q. liaotungensis* which they stated to be probably a form of *Q. mongolica*. They also mentioned that they had not seen a related species, *Q. wutaishanica* H. Mayr. Menitsky (Nov. Syst. Pl. Vasc. 10: 115, 1973) appears to have been the first to accept *Q. wutaishanica* as an earlier name for *Q. liaotungensis* which he placed in synonymy. It is my opinion, from the specimens and details available, that Nakai's two forms belong to *Q. mongolica* and I therefore follow Rehder.

Rehder also referred to *Q. funebris* var. *glabra* Lévl. but I have not seen a specimen bearing this name.

Camus (Les Chênes, texte 2: 145, 1939) also placed the two Léveillé taxa under *Q. liaotungensis*.

2000. *Quercus phillyraeoides* A. Gray ssp. *fokienensis* (Nakai) Menits. in Nov. Syst. Pl. Vasc. 10: 123 (1973).

Q. fokienensis Nakai in Journ. Arn. Arb. 5: 75 (1924).

Maesa singuliflora Lévl. in Fedde, Rep. Sp. Nov. 10: 440 (1912) & Fl. Kouy-Tchéou 287 (1914); Rehder in Journ. Arn. Arb. 10: 121 (1929) pro syn. sub *Q. phillyraeoides*; Lauener in Notes R.B.G. Edinb. 35: 272 (1977), pro syn. sub *Q. phillyraeoides*.

Q. singuliflora (Lévl.) A. Camus, Les Chênes, Atlas 2: 6, t. 81, f. 6-9 (1935-36), texte 2: 14 (1939); Menits. in Nov. Syst. Pl. Vasc. 10: 124 (1973).

CHINA. Kweichow, Tin-fan, bois, petit arbre, vi 1909, *Cavalerie* 3626 (holo. *M. singuliflora*, E).

In 1973, Menitsky retained *Q. singuliflora* whilst remarking that it was extremely close to *Q. phillyraeoides* ssp. *fokienensis* and distinguished from it by the narrower and longer leaves. In 1974 he determined an Edinburgh isotype specimen as ssp. *fokienensis*, and I therefore here place *Q. singuliflora* in synonymy.

2001. *Quercus semecarpifolia* Smith subsp. *glabra* (Franch.) Hand.-Mazz., Symb. Sin. 7: 39 (1929); Menits. in Nov. Syst. Pl. Vasc. 10: 129 (1973).

Q. semecarpifolia Smith var. *glabra* Franch. in Journ. de Bot. 13: 151 (1899).

Q. guyavaefolia Lévl. in Fedde, Rep. Sp. Nov. 12: 363 (1913) & Cat. Pl. Yunnan 67 (1916); Rehder in Journ. Arn. Arb. 10: 121 (1929) & 17: 71 (1936); A. Camus, Les Chênes, Atlas 1: 29, t. 35 (1934), texte 1: 379 (1938).

Q. rehderiana Hand.-Mazz. in Sitzgsz. Akad. Wiss. Wien Math.-Nat. Kl. 62: 129 (1925).

Q. semecarpifolia Smith var. *longispica* Hand.-Mazz., Symb. Sin. 7: 39 (1929).

Q. longispica (Hand.-Mazz.) A. Camus, Les Chênes, Atlas 1: 30, t. 37, f. 1-5 (1934), texte 1: 398 (1938).

Q. pseudosemecarpifolia A. Camus, Les Chênes, Atlas 1: 31, t. 37, f. 6-13 (1934), texte 1: 399 (1936-38).

CHINA. Yunnan, montagnes de Siao-ou-long, 2600 m, chêne vert, petit arbre, feuilles persistantes, xi 1912, E. E. Maire s.n. (holo. *Q. guyavaefolia*, E).

Rehder & Camus retained *Q. guyavaefolia* as a distinct species. Handel-Mazzetti regarded it as a synonym of his *Q. semecarpifolia* var. *longispica*. Camus created *Q. pseudosemecarpifolia* to raise var. *glabra* to specific rank. Menitsky, whom I have followed, treats all of these under subsp. *glabra*.

In a paper on the classification of the Fagaceae of Yunnan, Hsü, Y. C. and Jen, H. W. (*Acta Phytotax. Sin.* 14(2): 73-88, 1976) key out *Q. guyavaefolia* and *Q. longispica* as distinct species, and *Q. pseudosemecarpifolia* is given as a synonym of *Q. rehderiana*.

2002. *Quercus serrata* Thunb., Fl. Jap. 176 (1784); Sarg., Pl. Wils. 3: 217 (1916); Rehder in Journ. Arn. Arb. 10: 120 (1929) & 17: 71 (1936); Menits. in Nov. Syst. Pl. Vasc. 10: 112 (1973).

Q. glandulifera Bl., Mus. Bot. Lugd.-Bat. 1: 295 (1851); A. Camus, Les Chênes, Atlas 2: 19, t. 102, f. 8-19 (1935-36), texte 2: 115 (1939). Nakai in Bot. Mag. Tokyo 29: 59 (1915) & Fl. Sylv. Kor. 3: 25 (1917); Rehder in Journ. Arn. Arb. 18: 274 (1937).

Q. coreana [Lévl. in litt. ex] Nakai in Bot. Mag. Tokyo 29: 59 (1915) & Fl. Sylv. Kor. 3: 25 (1917), nom. nud. pro syn.

KOREA. Quelpaert in sylvis, v 1911, *Taquet* 5987 (*Q. coreana*, E).

REFERENCES FOR BETULACEAE/FAGACEAE

- CAMUS, A. (1929). Les Châtaigniers, Monographie des genres *Castanea* et *Castanopsis*, Atlas, *Encycl. Econ. Sylv.* 3: t. 1-76; Texte, l.c. 3: 1-604.
 — (1934-54). Les Chênes, Monographie du genre *Quercus*, Atlas, 1, *Encycl. Econ. Sylv.* 6: t. 1-78 (1934); op. cit. 2, l.c. 7: 79-236 (1935-36); op. cit. 3, l.c. 8: t. 237-522 (1948). Texte, op. cit. 1, l.c. 6: 1-686 (1938); op. cit. 2, l.c. 7: 1-830 (1939); op. cit. 3, l.c. 8: 1-1314 (1952-54).
 HSÜ, Y. C. & JEN, H. W. (1975-76). The Classification and Distribution of Fagaceae of Yunnan Province. 1, *Acta Phytotax. Sin.* 13(4): 9-26 (1975); op. cit. 2, l.c. 14(2): 73-88 (1976).
 HU, H. H. (1933). A review of the genus *Carpinus* in China. *Sunyatsenia* 1: 103-120.
 — (1948). Notulae Systematicae ad floram sinensium II. *Bull. Fan. Mem. Inst. Biol.* n.s. 1: 141-151.
 — (1951). Additional Notes on the Fagaceae of Yunnan. 1. *Acta Phytotax.* 1: 103-118; op. cit. 2, l.c. 1: 139-155.
 MENITSKY, G. (1972). Generis *Quercus* L. species Asiae Austro-occidentalis. *Nov. Syst. Pl. Vasc.* 9: 105-140.
 — (1973-77). Conspectus Specierum generis *Quercus* L. *Nov. Syst. Pl. Vasc.* 10: 107-134 (1973); op. cit., l.c. 13: 46-69 (1976); op. cit., l.c. 14: 40-64 (1977).

SALICACEAE (with D. McKean)

2003. *Populus adenopoda* Maxim.; Hand.-Mazz., Symb. Sin. 7: 58 (1929); Rehder in Journ. Arn. Arb. 17: 65 (1936) & 18: 273 (1937); Hao in Contr. Inst. Bot. Nat. Acad. Peiping 3: 228 (1935).

- P. macranthela* Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 142 (1905), in Le Monde des Pl. 12(62): 9 (1910) & in Fedde, Rep. Sp. Nov. 8: 446 (1910); Rehder in Journ. Arn. Arb. 10: 111 (1929).
- P. rotundifolia* Griff. α *macranthela* (Lévl. & Van.) Gombocz in Bot. Közlem 10: 25, (7) (1910).
- P. rotundifolia* Griff. var. *macranthela* (Lévl. & Van.) Lévl., Fl. Kouy-Tchéou 380 (1915) & Cat. Pl. Yunnan 250 (1917).
- CHINA. Kweichow, Pin-fa, gr. arbre, 1 iv 1903, *Cavalerie* 974 (holo. *P. macranthela*, E).

See Rehder for further synonymy and detailed notes. It is not known whether Gombocz was making a variety or subspecies of *P. macranthela*.

- 2004. *Populus bonatii*** Lévl. in Le Monde des Pl. 12(62): 9 (1910), Fedde, Rep. Sp. Nov. 8: 445 (1910) & Cat. Pl. Yunnan 250 (1917) "bonatiana"; Schneid. in Sarg., Pl. Wils. 3: 39 (1916); Rehder in Journ. Arn. Arb. 10: 112 (1929) & 18: 273 (1937); Hand.-Mazz., Symb. Sin. 7: 59 (1929); Hao in Contr. Inst. Bot. Acad. Peiping 3: 241 (1935).

CHINA. Yunnan, Pa-ta-ouan, près Pin-tchouan, 3 iii 1907, *Jean Py* 665 (holo. E).

- 2005. *Salix andropogon*** Lévl. in Fedde, Rep. Sp. Nov. 3: 21 (1906), in Bull. Soc. Bot. Fr. 56: 297 (1909) & Fl. Kouy-Tchéou 381 (1915); Schneider in Sarg., Pl. Wils. 3: 170 (1916); Hao in Fedde, Rep. Beih. 93: 109, t. 42, f. 83 (1936); Rehder in Journ. Arn. Arb. 10: 117 (1939), & 18: 255 (1937).

CHINA. Kweichow, lit du fleuve, submergés aux grandes eaux, 15 xii 1904, *Esquirol* 327 (holo. E).

- 2006. *Salix angiolepis*** Lévl. in Fedde, Rep. Sp. Nov. 3: 22 (1906), in Bull. Soc. Bot. Fr. 56: 297 (1909) & Fl. Kouy-Tchéou 381 (1915); Schneider in Sarg., Pl. Wils. 3: 104 (1916); Rehder in Journ. Arn. Arb. 10: 113 (1929) & 18: 255 (1937); Hao in Fedde, Rep. Beih. 93: 40, t. 1, f. 1 (1936).

CHINA. Kweichow, Pin-fa, 1903, *Cavalerie* 2069 (holo. E).

- 2007. *Salix babylonica*** L., Sp. Pl. 1017 (1753); Rehder in Journ. Arn. Arb. 10: 115 (1929); Lauener in Notes R.B.G. Edinb. 40: 496 (1983).

Ficus salix Lévl. in Fedde, Rep. Sp. Nov. 4: 66 (1907) & Fl. Kouy-Tchéou 433 (1915).

CHINA. Kweichow, sine loc., *Esquirol* 771 (holo. *F. salix*, E).

- 2008. *Salix blinii*** Lévl. in Fedde, Rep. Sp. Nov. 10: 435 (1912); Schneider in Sarg., Pl. Wils. 3: 161 (1916); Rehder in Journ. Arn. Arb. 10: 117 (1929) & 18: 274 (1937); Nakai, Fl. Sylv. Kor. 18: 106, t. 18 (1930) & in Bull. Nat. Sci. Mus. Tokyo 31: 78 (1952).

S. taquetii Lévl. in Fedde, Rep. Sp. Nov. 10: 436 (1912).

KOREA. Quelpaert, Hallaisan, in silvis torrentium, 1200 m, vi 1909, *Taquet* 3248 (syntype *S. blinii*, E); *Taquet* 3249 (syntype *S. blinii*—n.v.); Hallaisan, in rupibus torrentium, 1700 m, vi 1909, *Taquet* 3245 (holo. *S. taquetii*, E).

2009. *Salix camusii* Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe ser. 2, 39: 326 (1904), in Fedde, Rep. Sp. Nov. 6: 378 (1909), in Bull. Soc. Bot. Fr. 56: 297 (1909), Fl. Kouy-Tchéou 381 (1915) & Cat. Pl. Yunnan 251 (1917); Schneider in Sarg., Pl. Wils. 3: 119 (1916); Rehder in Journ. Arn. Arb. 10: 115 (1929); Hand.-Mazz., Symb. Sin. 7: 72 (1929) ♀ pro syn. sub *S. etosia* Schneid., ♂ pro syn. sub *S. praticola* Hand.-Mazz.; Hao in Fedde, Rep. Beih. 93: 45 (1936), ♂ pro syn. sub *S. dodecandra* Lévl. & l.c. 93: 63 (1936), ♂ pro syn. sub *S. tetradenia* Hand.-Mazz.

♀ *S. erioclada* Lévl. in Fedde, Rep. Sp. Nov. 3: 22 (1906), in Bull. Soc. Bot. Fr. 56: 299 (1909) & Fl. Kouy-Tchéou 381 (1915); Rehder in Journ. Arn. Arb. 10: 115 (1929), 17: 65 (1936) & 18: 255 (1937); Hand.-Mazz., Symb. Sin. 7: 64 (1929); Hao in Fedde, Rep. Beih. 93: 70, t. 20, f. 40 (1936).

CHINA. Kweichow, environs de Kouy-Yang, Gan-pin etc., dans les mont. du Collège, pet. arbuste, branches dressées, 29 iii 1898, *Bodinier* 2134 p.p. ♂ (lecto. *S. camusii*, E); montée de Pia-fong à La-Jang, 4 iii 1905, *Esquirol* 367 (holo. *S. erioclada*, E).

Both Rehder and Hao included *S. camusii* in synonymy under *S. dodecandra* but as *S. camusii* consistently has only two stamens and *dodecandra* up to 12 stamens (from 5–12) we consider they are distinct.

The type of *S. camusii* consists of staminate and pistillate specimens. The staminate branch was determined by Handel-Mazzetti as *S. praticola* Hand.-Mazz. and later by Hao as *S. dodecandra*. Handel-Mazzetti thought the pistillate branch was *S. etosia* Schneider and Hao later determined it as *S. tetradenia* Hand.-Mazz. According to the description it is possible to select either the staminate or pistillate branch as typifying *S. camusii*, and although the two elements may not be dissimilar, we choose the staminate branch as the lectotype.

S. erioclada, which has hitherto been maintained as a distinct species, also has two stamens and we consider it to be synonymous with *S. camusii*. Schneider drew attention to the similarity between these two species.

The type of *S. etosia* is *Wilson* 2112 and Hao stated that the specimen he saw consisted of two pistillate branches, one of which was *S. wallichiana* Anderss. (= *S. disperma* [Roxb. ex] D. Don q.v.), the other *S. tetradenia*. The Edinburgh sheet of *Wilson* 2112 has only one pistillate branch of *S. etosia* which Handel-Mazzetti has annotated 'I find it quite congruent with *S. camusii*'. It appears to us that both branches of *S. camusii* and *Wilson* 2112 (E) may all represent the same taxon, i.e. *S. camusii*.

With regard to nomenclature, Hao disregarded the name of *S. etosia* (1916) and split it between *S. tetradenia* (1929) & *S. wallichiana* (1860). He presumably regarded *S. etosia* as consisting of discordant elements. Without seeing the same specimen as Hao we cannot say whether it is possible to select one of these elements as a satisfactory type.

2010. *Salix cavaleriei* Lévl. in Bull. Soc. Bot. Fr. 56: 298 (1909) & Cat. Pl. Yunnan 251 (1917); Schneider in Sarg., Pl. Wils. 3: 101 (1916); Hand.-Mazz., Symb. Sin. 7: 61 (1929); Rehder in Journ. Arn. Arb. 10: 113 (1929), 17: 65 (1936) & 18: 254 (1937); Hao in Fedde, Rep. Beih. 93: 46 (1936); Kimura in Sci. Rep. Taihoku Univ. (Biol.) 12: 320 (1937).

S. polyandra Lévl. in Bull. Soc. Agric. Sci. Arts Sarthe sér. 2, 39: 325 (1904) and in Bull. Soc. Bot. Fr. 56: 300 (1909) & in Fedde, Rep. Sp. Nov. 6: 377 (1909).

S. pyi Lévl. in Bull. Soc. Bot. Fr. 56: 300 (1909).

S. yunnanensis Lévl. in Bull. Soc. Bot. Fr. 56: 301 (1909).

CHINA. Yunnan, Yunnan-sen, pagode de He long tan, 19 iii 1905, *Ducloux* 669 (syntype *S. cavaleriei*, E); sine loc., 17 iv 1906, *Ducloux* 658 (syntype *S. cavaleriei*, E); environs de Yunnan-sen, bord des canaux dans la plaine, arbre, 15 ii 1897, *Bodinier* 65 (holo. *S. polyandra*, E); Yunnan-sen, vallons du Tchong-Chan, 21 ii 1906, *Ducloux* s.n. (holo. *S. pyi*—n.v.?); Yunnan-sen, plaine, 4 iv 1906, *Ducloux* 654 (holo. *S. yunnanensis*, E).

The type of *S. pyi* is a *Ducloux* specimen from Tchong-chan dated 21 ii 1906 but unnumbered. There is a specimen in E from Tchong-? (illegible) dated 21 ii 1906 and numbered 657. It is annotated 'S. cantoniensis an sp. nov.' in Lévillé's hand. We are uncertain whether or not this is a type of *S. pyi*.

2011. *Salix disperma* [Roxb. ex] D. Don, Prodr. Fl. Nep. 58 (1825); Kimura in Hara, Chater & Williams, Enum. Fl. Pl. Nep. 3: 213 (1982).

S. wallichiana Anderss. in Kongl. Vetensk. Acad. Handl. 1850: 477 (1851) & in Kongl. Svenska Vetenskapskad. Handl. 6(1): 80, t. 5, f. 46 (1867); Schneider in Sarg., Pl. Wils. 3: 64 (1916); Lévl., Cat. Pl. Yunnan 252 (1917); Hand.-Mazz., Symb. Sin. 7: 87 (1929); Rehder in Journ. Arn. Arb. 10: 116 (1929) & 18: 255 (1937); Hao in Fedde, Rep. Beih. 93: 92 (1936).

S. pachyclada Lévl. in Fedde, Rep. Sp. Nov. 3: 22 (1906), in Bull. Soc. Bot. Fr. 56: 300 (1909) & Fl. Kouy-Tchéou 381 (1915); Rehder in Journ. Arn. Arb. 10: 116 (1929).

S. funebris Lévl. in Fedde, Rep. Sp. Nov. 12: 287 (1913) & Cat. Pl. Yunnan 251 (1917).

S. mairei Lévl. in Fedde, Rep. Sp. Nov. 13: 342 (1914).

CHINA. Kweichow, montée de La-jang à Pia-fong, 4 iii 1905, *Esquirol* 368 (holo. *S. pachyclada*, E). Yunnan, bord des lagunes de Ta-hai-tse, 3200 m, saule noir, v 1912, *E. E. Maire* s.n. (holo. *S. funebris*, E); vallée de Kiao-me-ti, 3000 m, bord du torrent, iv 1913, *E. E. Maire* s.n. (holo. *S. mairei*, E).

2012. *Salix dodecandra* Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 141 (1905), 56: 298 (1909) & Fl. Kouy-Tchéou 381 (1915); Rehder in Journ. Arn. Arb. 10: 112 (1929); l.c. 18: 254 (1937) excl. syn. *S. camusii*; Schneider in Sarg., Pl. Wils. 3: 101 (1916); Hao in Fedde, Rep. Beih. 93: 45, t. 4, f. 7 (1936), p.p. excl. syn. *S. camusii*.

S. anisandra Lévl. & Van. in Fedde, Rep. Sp. Nov. 3: 22 (1906), in Bull. Soc. Bot. Fr. 56: 297 (1909) & Fl. Kouy-Tchéou 381 (1915); Schneider in Sarg., Pl. Wils. 3: 102 (1916) sub *S. cavaleriei* Lévl.; Rehder in Journ. Arn. Arb. 10: 113 (1929).

CHINA. Kweichow, Pin-fa, 22 iii 1902, *Cavalerie* 1317 (holo. *S. dodecandra*, E); Pia-fong, iii 1905, *Esquirol* 362 (holo. *S. anisandra*, E).

2013. *Salix eriocarpa* Fr. & Sav., Enum. Pl. Jap. 1: 459 (1875), 2: 503 (1879); Koidz. in Bot. Mag. Tokyo 27: 88 (1913).

S. dolichostachya Seem. var. *hirosakensis* Lévl. & Van. in Fedde, Rep. Sp. Nov. 3: 22 (1906); Schneider in Sarg., Pl. Wils. 3: 110 (1916), pro syn. sub *S. hondoensis* Koidz.; Rehder in Journ. Arn. Arb. 10: 114 (1929), pro syn. sub *S. hondoensis*.

S. hirosakensis (Lévl. & Van.) Koidz. in Bot. Mag. Tokyo 27: 264 (1913). JAPAN. Honshu, Hirosaki, secus aquas, 7–8 m, vi 1905, *Faurie* 6602 (holo. var. *hirosakensis*, E).

The Flora of Japan places *S. hondoensis* in synonymy under *S. jessoensis* Seemen but does not mention var. *hirosakensis*. Certainly *S. eriocarpa* and *S. jessoensis* are closely related.

2014. *Salix gilgiana* Seem., Salic. Jap. 59, t. 13, f. a–d (1903); Nakai, Fl. Sylv. Kor. 18: 112, t. 19 (1930); Rehder in Journ. Arn. Arb. 18: 274 (1937); Ohwi, Fl. Jap. (Engl. ed.) 368 (1965).

S. gymnolepis Lévl. in Fedde, Rep. Sp. Nov. 3: 22 (1906); Schneider in Sarg., Pl. Wils. 3: 110 (1916), pro syn. sub *S. makinoana* Seemen; Rehder in Journ. Arn. Arb. 10: 114 (1929), pro syn. sub *S. makinoana*. *S. purpurea* L. subsp. *gymnolepis* (Lévl.) Koidz. in Bot. Mag. Tokyo 27: 267 (1913).

JAPAN. Honshu, Hirosaki, secus rivos, 6–7 m, v 1905, *Faurie* 6615 (holo. *S. gymnolepis*, E).

2015. *Salix hallaisanensis* Lévl. in Fedde, Rep. Sp. Nov. 10: 435 (1912); Rehder in Journ. Arn. Arb. 10: 116 (1929), pro syn. sub *S. caprea* L. & in l.c., 18: 273 (1937); Nakai, Fl. Sylv. Kor. 18: 129, t. 24 (1930) & in Bull. Nat. Sci. Mus. Tokyo 31: 78 (1952).

S. hallaisanensis Lévl. var. *nervosa* Lévl. in Fedde, Rep. Sp. Nov. 10: 435 (1912).

KOREA. Quelpaert, in sylvis Hallaisan, 1200 m, vi 1909, *Taquet* 3258 (lecto. *S. hallaisanensis*, E); 1500 m, 12 viii 1900, *Taquet* 1444 (holo. var. *nervosa*, E).

The following specimens, all from Hallaisan, are original syntypes of *S. hallaisanensis*: *Taquet* 1442♀, 1443♂, 3251 & 3254 (sterile), 3252, 3253, 3255, 3259 & 3560 all♀, 3256, 3257♂. As there are so many syntypes it was appropriate to choose a suitable lectotype.

2016. *Salix japonica* Thunb., Fl. Jap. 24 (1784); Koidz. in Bot. Mag. Tokyo 27: 90 (1913); Rehder in Journ. Arn. Arb. 10: 116 (1929).

S. japonica Thunb. var. *nipponensis* Lévl. in Bull. Acad. Géog. Bot. 14: 209 (1904).

No specimen was cited by Lévillé but Koidzumi included var. *nipponensis* in synonymy under *S. japonica*.

2017. *Salix koreensis* Anderss. in DC., Prodr. 16(2): 271 (1868); Schneider in Sarg., Pl. Wils. 3: 111 (1916); Rehder in Journ. Arn. Arb. 10: 114 (1929)

& 18: 273 (1937); Nakai, Fl. Sylv. Kor. 18: 164, t. 38 (1930) & in Bull. Nat. Sci. Mus. Tokyo no. 31: 78 (1952); Nas. in Fl. URSS 5: 201 (1936); Ohwi, Fl. Jap. (Engl. ed.) 365 (1965).

S. pogonandra Lévl. in Fedde, Rep. Sp. Nov. 10: 436 (1912).

S. pseudogilgiana Lévl., l.c.

S. pseudolasiogyne Lévl., l.c.; Nakai, Fl. Sylv. Kor. 18: 168, t. 39 (1930) & in Bull. Nat. Sci. Mus. Tokyo 31: 79 (1952).

S. pseudojessoensis Lévl. in Fedde, Rep. Sp. Nov. 10: 436 (1912).

S. feddei Lévl., l.c.

KOREA. Quelpaert S, Piento Tchimpat, 14 iv 1908, *Taquet* 4706 (holo. *S. pogonandra*, E); Quelpaert, iv 1909, *Taquet* 3240 (holo. *S. pseudogilgiana*, E); Chemulpo, v 1909, *Taquet* 3243 (holo. *S. pseudolasiogyne*, E); Quelpaert, in pago Polmongi, iv 1908, *Taquet* 1441 (holo. *S. pseudojessoensis*, E); Quelpaert, in sepibus Setchimin, 500 m, v 1909, *Taquet* 3242 (holo. *S. feddei*, E).

2018. *Salix luctuosa* Lévl. in Fedde, Rep. Sp. Nov. 13: 342 (1914) & Cat. Pl. Yunnan 251 (1917); Schneider in Sarg., Pl. Wils. 3: 119 (1916); Hand.-Mazz., Symb. Sin. 7: 68 (1929); Rehder in Journ. Arn. Arb. 10: 115 (1929), 17: 66 (1936) & 18: 255 (1937); Hao in Fedde, Rep. Beih. 93: 78 (1936).

CHINA. Yunnan, brousse des mont. à Kiao-me-ti, 3200 m, saule, chatons blancs, v 1913, *E. E. Maire* s.n. (holo. E—2 sheets ♀ & ♂).

2019. *Salix miyabeana* Seemen in Bot. Jahrb. 21, Beibl. 53: 50 (1896); Ohwi, Fl. Jap. (Engl. ed.) 368 (1965).

S. sapporoensis Lévl. in Bull. Soc. Bot. Fr. 56: 302 (1909); Schneider in Sarg., Pl. Wils. 3: 166 (1916); Rehder in Journ. Arn. Arb. 10: 117 (1929).

JAPAN. Hokkaido, Sapporo, 12 vi 1908, *Faurie* 266 (lecto. *S. sapporoensis*, E).

Léveillé cited 3 syntypes from Sapporo, *Faurie* 266, 262 and 268. *F.* 262 appears to be different from the other two numbers and may be *S. sachalinensis* as determined by Koidzumi. *F.* 268 was determined by Koidzumi as *S. purpurea* L. which does not occur in Japan. *F.* 266 and *F.* 268 seem to us to be identical.

2020. *Salix sachalinensis* Fr. Schmidt. in Mém. Acad. Imp. Sci. St. Pétersb. ser. 7, 12(2): 173, 219 (1868); Schneider in Sarg., Pl. Wils. 3: 158 (1916); Rehder in Journ. Arn. Arb. 10: 117 (1929); Nas. in Fl. URSS 5: 145 (1936); Sugawara, Fl. Sagh. 2: 683, t. 321 (1939).

S. korsakoviensis Lévl. in Bull. Soc. Bot. Fr. 56: 302 (1909); Koidz. in Bot. Mag. Tokyo 27: 264 (1913), pro syn. sub *S. stipularis* Smith.

SAKHALIN. Secus aquas communis, vi 1908, *Faurie* 274 (syntype *S. korsakoviensis*, E); foliis adultis no. 274 & 275, ix 1908, *Faurie* 276 (syntype *S. korsakoviensis*, E).

Faurie 275, collected in July 1908, is not a type specimen as it was not cited by Léveillé.

Some of the leaves of *Faurie* 276 are approximately 20 cm long, i.e. about twice as long as given in descriptions (Schneider says leaves 17 × 3.5 cm.).

2021. *Salix subfragilis* Anderss. in Mem. Amer. Acad. Arts n.s. 6: 450 (1859); Ohwi, Fl. Jap. (Engl. ed.) 364 (1965).

S. nipponica Fr. & Sav., Enum. Pl. Jap. 1: 459 (1875); Hao in Fedde, Rep. Beih. 93: 39 (1936); Nas in Fl. URSS 5: 186 (1936).

S. kinashii Lévl. & Van. in Bull. Soc. Bot. Fr. 52: 141 (1905); Koidz. in Bot. Mag. Tokyo 27: 94 (1913), pro syn. sub *S. amygdalina* L.

S. hamatidens Lévl. in Bull. Soc. Bot. Fr. 56: 301 (1909); Schneider in Sarg., Pl. Wils. 3: 108 (1916); Rehder in Journ. Arn. Arb. 10: 114 (1929).

S. amygdalina L. var. *nipponica* (Fr. & Sav.) Schneider in Sarg., Pl. Wils. 3: 106 (1916); Rehder in Journ. Arn. Arb. 10: 113 (1929) & 18: 273 (1937).

JAPAN. Honshu, Aomori, v 1902, *Kinashi* 11 (holo. *S. kinashii*, E); Hokkaido, secus aquas Sapporo, 13 vi 1908, *Faurie* 263, 264 (syntypes *S. hamatidens*, E).

2022. *Salix variegata* Franch. in Nouv. Arch. Mus. Paris sér. 2, 10: 82 (1887-8); Hao in Fedde, Rep. Beih. 93: 110 (1936); Rehder in Journ. Arn. Arb. 18: 255 (1937).

S. duclouxii Lévl. in Bull. Soc. Bot. Fr. 56: 298 (1909), Fl. Kouy-Tchéou 381 (1915) & Cat. Pl. Yunnan 251 (1917); Schneider in Sarg., Pl. Wils. 3: 170 (1916); Rehder in Journ. Arn. Arb. 10: 118 (1929) & 17: 66 (1936); Hand.-Mazz., Symb. Sin. 7: 87 (1929).

S. duclouxii Lévl. var. *kouytchensis* Lévl. in Bull. Soc. Bot. Fr. 56: 298 (1909).

S. kouytchensis (Lévl.) Schneider in Sarg., Pl. Wils. 3: 171 (1916); Rehder in Journ. Arn. Arb. 10: 117 (1929).

CHINA. Yunnan, Yunnan-sen, 25 vii 1905, *Ducloux* 670 (holo. *S. duclouxii*, E). Kweichow, Ouen-tsen-kiao (Kouy-tin), bord de la rivière, 23 xi 1902, *Cavalerie* 728 (holo. var. *kouytchensis*, E).

2023. *Salix vulpina* Anderss. in Mem. Amer. Acad. Arts, n.s. 6: 452 (1859); Koidz. in Bot. Mag. Tokyo 27: 89 (1913); Schneider in Sarg., Pl. Wils. 3: 130 (1916); Rehder in Journ. Arn. Arb. 10: 115 (1929); Ohwi, Fl. Jap. (Engl. ed.) 366 (1965).

S. shiraii Seemen var. *vulcaniana* Lévl. in Bull. Acad. Géog. Bot. 14: 209 (1904).

S. ignicoma Lévl. in Bull. Acad. Géog. Bot. 16: 143 (1906).

JAPAN. Hokkaido, volcan de Tarumai, 17 vi 1893, *Faurie* 10026, 10027 (syntypes var. *vulcaniana*, E); Honshu, in sylvis Aomori, v 1904, *Faurie* 5763 (holo. *S. ignicoma*, E).

Faurie 4995 (E) from Goto Island, a syntype of *S. saidaeana* Seemen probably belongs to *S. vulpina*.

2024. *Salix wilsonii* Seemen in Bot. Jahrb. 36, Beibl. 82: 28 (1905); Lévl. in Mem. Real Acad. Ci. Artes Barcelona ser. 3, 12: 561 (1916); Schneider in Sarg., Pl. Wils. 3: 40 (1916); Rehder in Journ. Arn. Arb. 10: 112 (1913), & 18: 254 (1937); Hao in Fedde, Rep. Beih. 93: 41, t. 1, f. 2 (1936); Kimura in Sci. Rep. Taihoku Univ. (Biol.) 13: 78 (1938).

S. argyi Lévl. in Fedde, Rep. Sp. Nov. 10: 37 (1912).

S. glandulosa Seemen var. *wilsonii* (Seemen) Görz in Fedde Rep. Sp. Nov. 36: 21 (1934); Kimura in Sci. Rep. Taihoku Univ. (Biol.) 11: 250 (1936).

CHINA. Kiangsu, arbor, magna, nom. vulg. 'se mē iam zu', *d'Argy* s.n. (holo. *S. argyi*, E).

REFERENCES FOR SALICACEAE

HAO, K. S. (1935). Synopsis of Chinese Populus. *Contr. Inst. Bot. Nat. Acad. Peiping* 3: 221-241.

—(1936). Synopsis of Chinese Salix. *Fedde, Rep. Beih.* 93: 1-123, t. 1-44.

KIMURA, A. (1936-38). Symbolae Iteologicae: 2, *Sci. Rep. Tohoku Univ. (Biol.)* 11: 243-252 (1936); op. cit. 4, l.c. 12: 311-321 (1937); op. cit. 5, l.c. 13: 71-82 (1938).

LÉVEILLÉ, H. (1906). Les Saules du Japon. *Bull. Acad. Géog. Bot.* 16: 143-152.

—(1909). Les Salicacées chinoises. *Bull. Soc. Bot. Fr.* 56: 285-290, 297-302.

LÉVEILLÉ, H. & VANIOT, E. (1904). Salices à R. P. Urb. Faurie in Japoniae lectae. *Bull. Acad. Géog. Bot.* 14: 206-211.

SCHNEIDER, C. (1916). Salicaceae. *Sarg., Pl. Wils.* 3: 16-179.

NOTE: This part concludes the evaluation of the Dicotyledons and it is hoped that work will continue on the Monocotyledons. However, as this could take some years, a multiple index of all the Lévillé names listed in Parts I-XVII of this Catalogue, together with the correct name, will be published as soon as possible.

The author would like to take this opportunity of thanking all those colleagues at home and abroad who have helped in various ways. Although there are undoubtedly some differences of taxonomic opinion, the primary purpose of this Catalogue has been to deal with Lévillé's species in one way or another, and it is hoped that it will at least provide a background for further research and for those with a particular interest in the flora of China and Korea, and, to some extent, Japan.